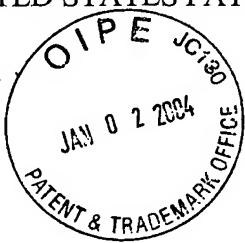


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dan Fraenkel §
Serial No.: 10/657,585 § Group Art Unit: 1621
Filed: 09/08/2003 § Confirmation No.: 9875
For: Chemically And Thermally § Examiner: Not Yet Assigned
Stabilized Alumina For Fischer- §
Tropsch Catalysts §



INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Att'y Docket No. 1856-33100
Client Ref. No. 9660.0-02
Date: December 30, 2003

Sir:

This Information Disclosure Statement, including completed Form PTO-1449, comprises a list of pertinent art of which Applicant is aware. This application was filed after June 30, 2003, therefore, copies of U.S. patent documents listed on Form PTO-1449 are not enclosed; however, copies of other pertinent publications are enclosed herewith.

The submission of this Information Disclosure Statement and the references submitted herewith is not an admission that the art cited is "prior" with respect to the present invention, nor is it a representation, that no better art exists. Applicants hereby reserve the right to swear behind or otherwise disprove any alleged "prior" nature of any art cited should the facts support and the situation warrant such an action. It is submitted that the art cited does not constitute a bar to the patentability of Applicants' invention under 35 U.S.C. § 102 or § 103.

Applicant believes no fee is due for the filing of these papers.

Respectfully submitted,

Tod T. Tumey
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Substitute for form 1449/PTO

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Application Number	10/657,585
Filing Date	Sept. 8, 2003
First Named Inventor	Dan Fraenkel
Art Unit	1621
Examiner Name	Not Yet Assigned

Sheet 1 of 4

Attorney Docket Number 1856-33100

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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U. S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		US- 2,892,858	06-30-1959	Ziegler
		US- 3,852,190	12-03-1974	Buss et al.
		US- 4,012,313	03-15-1977	Buss et al.
		US- 4,063,851	12-20-1977	Weldon
		US- 4,224,192	09-23-1980	Foster et al.
		US- 4,387,085	06-07-1983	Fanelli et al.
		US- 4,617,183	10-14-1986	Lewis et al.
		US- 4,708,945	11-24-1987	Murrell et al.
		US- 4,744,974	05-17-1988	Lewis et al.
		US- 4,831,007	05-16-1989	Murrell et al.
		US- 4,891,127	01-02-1990	Murrell et al.
		US- 5,055,019	10-08-1991	Meyer et al.
		US- 5,102,851	04-07-1992	Eri et al.
		US- 5,116,879	05-26-1992	Eri et al.
		US- 5,134,107	07-28-1992	Narula
		US- 5,232,580	08-03-1993	Le et al.
		US- 5,837,634	11-17-1998	McLaughlin et al.
		US- 6,063,358	05-16-2000	Lindquist et al.
		US- 6,224,846	05-01-2001	Hurlburt et al.

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		GB 640,965	08-02-1950	Anglo-Iranian Oil Co.
		GB 2 352 194 A	01-24-2001	Sasol Technology
		WO 02/07883 A2	01-31-2002	Sasol Technology
		WO 99/42214	08-26-1999	Sasol Technology

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Sheet

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				Application Number	10/657,585
				Filing Date	September 8, 2003
				First Named Inventor	Dan Fraenkel
				Group Art Unit	1621
Examiner Name	Not Yet Assigned				
Sheet	3	of	4	Attorney Docket Number	1856-33100

NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.
		IHNS SCHULZ; Short History and Present Trends of Fischer-Tropsch Synthesis; Abstract; Universiot Karlsruhe, Germany; 10 pages.
		M. ABSI-HALABI, et al.; "Studies on Pore Size Control of Alumina: Preparation of Alumina Catalyst Extrudates with Large Unimodal Pore Structure by Low Temperature Hydrothermal Treatment"; Preparation of Catalysts V, 1991 Elsevier Science Publishers B.V., Amsterdam, pp. 155 - 163.
		ALCOA WORLD CHEMICAL; "High purity, high density, boehmite aluminas"; ALCOA Product Data USA/6070-RO4/0801; 2 pages.
		ALCOA WORLD CHEMICAL; "High purity, high density, boehmite aluminas"; ALCOA Product Data Sheet USA/6070-RO4/0801; 2 pages.
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		RONG-SHENG ZHOU, et al.; "Structures and Transformation Mechanisms of the η , γ and θ Transition Aluminas"; International Union of Crystallography 1991; Institute for Ceraminc Superconductivity, New York State College of Ceramics, Alfred University, Alfred, NY 14802, USA; pp. 617-630
		RICHARD L. SMITH, et al.; "The Influence of Diaspore Seeding and Chlordie Concentration on the Transformation of 'Diasporic' Precursors to Corundum"; Journal of the American Ceramic Society, October 16, 2000; 31 pages.
		S. MATSUDA, et al.; "A New Support Material for Catalytic Combustion Above 1000 C"; 8th International Congress on Catalysis; Vol. IV: Impact of surface science on catalysis, structure-selectivity/activity correlations, new routes for catalyst synthesis, pages IV-879-IV-889.
		H.C. STUMPF, et al.; "Thermal Transformations of Aluminas and Alumina Hydrates"; Industrial and Engineering Chemistry, Vol. 42, No. 7, July 1950; pages 1398-1403.
		SHU-HUI CAI, et al.; "Atomic Scale Mechanism of the Transformation of γ -Alumina to θ -Alumina"; The American Physical Society 2002; Physical Review Letters, Vol. 89, No. 23; December 2, 2002; 4 pages.
		ZHONG-WEN LIU, et al.; "Partial Oxidation of Methane Over Nickel Catalysts Supported on Various Aluminas"; Korean J. Chem. Eng., Vol. 19, No. 5, pages 735-741 (2002).

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				Application Number	10/657,585
				Filing Date	September 8, 2003
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				Group Art Unit	1621
Examiner Name	Not Yet Assigned				
Sheet	4	of	4	Attorney Docket Number	1856-33100

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		HYUN-SEOG ROH, et al.; "Partial Oxidation of Methane Over Ni/θ-Al ₂ O ₃ Catalysts"; Chemistry Letters 2001; March 19, 2001; pages 666-667.
		HYUN-SEOG ROH, et al.; "Partial Oxidation of Methane Over Ni/Ce-ZrO ₂ /θ-Al ₂ O ₃ "; Korean J. Chem. Eng., Vol. 19, No. 5; pages 742-748 (2002).
		HIROMICHI ARAI, et al.; "Thermal stabilization of catalysts supports and their application to high-temperature catalytic combustion"; Applied Catalysis A: General 138 (1996); pages 161-176; Elsevier Science Publishers B.V., Amsterdam.
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		S. N. RASHKEEV, et al.; "Transition metal atoms on different alumina phases: The role of subsurface sites on catalytic activity"; Physical Review B, Vol. 67, No. 115414; 4 pages.
		HENNIE SCHAPER, et al.; "Thermal Stabilization of High Surface Area Lumina"; Solid State Ionics, Vol. 16 (1985), pages 261-266.
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		S. SUBRAMANIAN, et al.; "Characterization of lanthana/alumina composite oxides"; Journal of Molecular Catalysis, Vol. 69 (1991); pages 235-245.
		P. SOUZA SANTOS, et al.; "Standard Transition Aluminas. Electron Microscopy Studies"; Materials Research, Vol. 3, No. 4; pages 104-114, 2000.

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